**In Preparation for our Field Study to Drumheller, please complete this worksheet so you are familiar with the terms and concepts we will be investigating**

Pg. 354-372 in your textbook

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What is a rock made of (pg. 354)?
2. What is the outer most layer of the Earth called?
3. To identify minerals we can investigate its properties (We WILL be doing this at Drumheller so please do your best to understand the different ways to test a mineral’s properties)
4. What is the Mohs Hardness Scale?
5. Look at the table 5.1 on pg. 355

Which mineral is the softest?

Which mineral is the hardest?

Which mineral has a Mohs hardness scale of 7?

1. The mineral’s crystal structure provides an important clue to its identity. We can look at the crystal formation of minerals to help identify rocks. What are six different crystal systems?
2. Another clue to help identify minerals is its lustre. What is lustre ?
3. We can also use colour to identify a mineral. However, not all minerals are the same colour all of the time and sometimes two minerals can be the same colour. Give an example which explains why we can not use colour alone to identify a mineral.
4. Explain how the Streak test is used to identify minerals.
5. Explain how cleavage and fracture give a clue to a mineral’s identity.
6. Transparency is another property of minerals (pg. 357). Explain the difference between:

Transparent:

Translucent:

Opaque:

1. We are going to see LOTS and LOTS of rocks in Drumheller. Do you remember learning about the rock families in grade 3? Let’s do a quick review…

Describe and give an example of each of the three families of rock:

**IGNEOUS ROCK:**

**SEDIMENTARY ROCK:**

**METAMORPHIC ROCK:**

1. **Rocks continue to change in an ongoing process called the rock cycle. Draw and label a diagram of the rock cycle:**
2. **Sediment can be compacted or cemented to form sedimentary rock. But sediment can also be carried to the ocean or it can become soil. Study the Figures at the bottom of pg. 371 and describe the difference between weathered rock fragments, immature soil and mature soil**
3. **We dug up rich, dark, topsoil for our indoor planters. Some groups dug even deeper and hit another layer that was lighter in colour. Then they dug even deeper and hit cocks and minerals. Explain the difference between these three layers. (pg. 372)**